**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

SENTIUS INTERNATIONAL, LLC,	
Plaintiff,	
v.	CIVIL ACTION NO. 2:16-CV-773
BLACKBERRY LIMITED and BLACKBERRY CORPORATION,	
Defendants.	

DEFENDANTS' RESPONSIVE CLAIM CONSTRUCTION BRIEF

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B	Declaration of Vijay K. Madisetti, Ph.D., dated January 23, 2013 in *Selex Communications, Inc. v. Google Inc.*, No. 1:09-CV-2927-TWT (N.D. Ga.).
C	Excerpt from Alan Freedman, The Computer Desktop Encyclopedia (2nd ed. 1999) for "lookup table."
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N	Excerpt from IBM, Dictionary of Computing (1994) for "offset."
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I.   INTRODUCTION

Defendants BlackBerry Limited and BlackBerry Corporation (collectively "BlackBerry")

submit this brief in support of their proposed claim constructions in this case. This case presents

the interesting situation in which all thirteen claim limitations are in means-plus-function format,

but the patent specifications do not disclose corresponding structure for many of these

limitations. As a result, the asserted claims are indefinite, and thus invalid. Plaintiff Sentius

International, LLC tries to salvage its case by asserting that certain portions of the specification

are disclosures of corresponding structure when in fact they are not. Sentius's brief misstates the

law with respect to means-plus-function limitations, misstates the patent specifications'

disclosures and lack thereof, and relies on an expert who agreed in a prior case that the approach

taken by Sentius here is incorrect. Because the means-plus-function limitations with no

corresponding structure are case dispositive, BlackBerry addresses them first, followed by the

remaining limitations whose constructions are in dispute.

II.   SENTIUS'S CLAIM CONSTRUCTION ARGUMENTS INDICATE THAT THE PENDING MOTION FOR SUMMARY JUDGMENT SHOULD BE GRANTED

In an attempt to defeat BlackBerry's summary judgment motion for improper broadening,

Sentius hinged its opposition on the argument that the "means for linking" limitation of "Claim

95 also requires link**s**, with at least one link for at least each discrete piece." Dkt. 48 at 1 (quoting

with added emphasis, Dkt. 47 at 16). In its claim construction brief, however, Sentius

acknowledges that only one link is required.

Specifically, Sentius argues that the function for the "means for linking" limitation is

"recording in a look-up table *a link* to *at least one* external reference material," and it argues the

structure is "a processor storing *a pointer* in the data structure for a given offset value range that

points the system to *at least one* corresponding external reference material for that offset value

range….” Dkt. 55 at 22-23 (emphases added). As there is no doubt that only one link is required

by Claim 95, the Court should grant summary judgment for the reasons set forth in BlackBerry’s

motion and reply. *See* Dkt. 41, 48.

III.   LEGAL STANDARDS

This Court is well versed in the applicable law governing claim construction and

indefiniteness, including with respect to means-plus-function limitations. Instead of repeating

that law, BlackBerry references the Court’s detailed explanation recently set forth in *Global*

Equity Management (SA) Pty. Ltd. v. Expedia, Inc., No. 2:16-CV-00095, 2016 WL 7416132, at

*6-10 (E.D. Tex. Dec. 22, 2016).

As the Court explained in *Global Equity*, “[f]or § 112, ¶ 6 limitations implemented by a

programmed general purpose computer or microprocessor, the corresponding structure described

in the patent specification must include an algorithm for performing the function.” *Id.* at *9

(citing *WMS Gaming Inc. v. Int’l Game Tech.*, 184 F.3d 1339, 1349 (Fed. Cir. 1999)). “[A]n

algorithm is a ‘step-by-step procedure for accomplishing a given result.’” *Ergo Licensing, LLC*

v. CareFusion 303, Inc., 673 F.3d 1361, 1365 (Fed. Cir. 2012) (citations omitted). If no such

algorithm is disclosed, “the claim is indefinite.” *Id.* at 1363.

In determining “whether a claim is indefinite,” courts “do not look to the knowledge of

one skilled in the art apart from and unconnected to the disclosure of the patent.” *ePlus, Inc. v.*

Lawson Software, Inc., 700 F.3d 509, 519 (Fed. Cir. 2012) (internal quotation marks and

citations omitted). Rather, they “look at the *disclosure* of the patent and determine if one of skill

in the art would have understood that *disclosure* to encompass [the required structure].” *Id.*

(citations omitted) (emphases in original). If no algorithm is disclosed, the claim is invalid. This

is true regardless of how simple it would have been for a person of ordinary skill to have

implemented the function. *See EON Corp. v. AT&T Mobility LLC*, 785 F.3d 616, 623-24 (Fed.

Cir. 2015).

The only exception to this rule is set out in *In re Katz Interactive Call Processing Patent*

Litigation, 639 F.3d 1303 (Fed. Cir. 2011) ("the *Katz* exception"). Under that exception, an

algorithm need not be disclosed when the function "can be achieved by any general purpose

computer without special programming." *Id.* at 1316. The Federal Circuit, however, has held

that this only applies in "rare circumstances" and has limited it to "processing," "receiving," and

"storing." *Ergo*, 673 F.3d at 1364-65. That is because those three functions are "'coextensive'

with a microprocessor itself." *EON Corp.*, 785 F.3d at 621-22. The *Katz* exception does not

apply just because a computer function is known or simple to implement. *Id.* at 621.

IV.   ARGUMENT FOR MPF LIMITATIONS

A.   Sentius's Proposed Structure for Every Single MPF Limitation Improperly Includes a "Processor" Programmed to Perform the Function.

Throughout its brief, Sentius proposes that the disclosed structure for each MPF

limitation be "a processor programmed to perform …" *See generally*, Dkt. 55. This is

problematic, because for many of the limitations, Sentius does not dispute that a general purpose

computer could not perform the function absent special programming. For these limitations,

Katz does not apply and thus, for the claims to survive indefiniteness, there must be an algorithm

(*i.e.*, structure) disclosed in the specification that performs the recited function. But Sentius's

proposed structure for each of these, instead of citing to an actual algorithm disclosed in the

specification, suggests an (improper) invocation of the *Katz* exception by proposing "a processor

programmed to perform [the function]." *Id.* This is an incorrect application of MPF law and all

of Sentius's such proposals should be rejected. MPF limitations require identification of

structure (*i.e.*, algorithms) disclosed in the specification corresponding to the recited function. Thus, Sentius's attempt to implicitly apply *Katz* to every MPF limitation should be rejected.

B.   Sentius Misuses the Notion of "One Of Ordinary Skill In The Art" to Substitute for a Lack of Corresponding Structure in the Specification.

Throughout its brief, Sentius argues that one skilled in the art would have the knowledge to gap-fill the specification whenever the specification does not expressly disclose an algorithm. This is a misapplication of the law. The knowledge of one of ordinary skill cannot overcome absence of the disclosure of an algorithm. *See Function Media, L.L.C., v. Google, Inc.*, 708 F.3d 1310, 1319 (Fed. Cir. 2013) ("Having failed to provide any disclosure of the structure for the [recited] function, [patentee] cannot rely on the knowledge of one skilled in the art to fill in the gaps."); *Blackboard, Inc. v. Desire2Learn, Inc.*, 574 F.3d 1371, 1385 (Fed. Cir. 2009) ("A patentee cannot avoid providing specificity as to structure simply because someone of ordinary skill in the art would be able to devise a means to perform the claimed function. To allow that form of claiming under section 112, paragraph 6, would allow the patentee to claim all possible means of achieving a function.") (citation omitted); *see also Default Proof Credit Card Sys., Inc. v. Home Depot U.S.A., Inc.*, 412 F.3d 1291, 1302 (Fed. Cir. 2005). As stated above, the court is to "look at the disclosure of the patent and determine if one of skill in the art would have understood that disclosure to encompass [the required structure]." *ePlus, Inc.*, 700 F.3d at 519 (citation omitted). If no algorithm is disclosed, the claim is invalid, regardless of how simple it would have been for a person of ordinary skill to have implemented the function. *See EON Corp.,* 785 F.3d at 623-24. The only exception to this rule is the *Katz* exception – which only applies in "rare circumstances" and is limited to "processing," "receiving," and "storing – where an algorithm need not be disclosed when the function "can be achieved by any general purpose computer without special programming." *Katz*, 639 F.3d at 1316.

Ironically, in a prior case, Sentius's claim construction expert in this case, Dr. Vijay K.

Madisetti, took positions that are inconsistent with, and undermine, the (legally incorrect)

positions he is taking in this case on behalf of Sentius. *See* Ex. B, Declaration of Vijay K.

Madisetti, Ph.D., in Support of Defendants' Claim Construction Brief in *Selex Communications,*

Inc. v. Google, Inc. et al., Case No. 1:09-cv-2927-TWT (N.D. Ga). Contrary to his declaration

submitted to this Court, in his prior declaration in which he testified for the defendants, Dr.

Madisetti testified (at ¶¶ 39, 162, 170, 171, respectively):

- "I have also assumed that if algorithms exist in the prior art, or if a PHOSITA could create an algorithm to program a computer or microprocessor to perform the recited function, but the specification fails to reveal any algorithm to do so, then the claim is still indefinite - because the public would be left to guess which algorithms are covered by the claimed invention."

- "It is my opinion that the Specification fails to disclose any algorithm for performing the function of monitoring a telephone number dialed by the user of the mobile telephone. While the Specification states that the control means performs the functions of 'monitoring a telephone number dialed by the user' (JA Ex. 1, 3:40-41) and 'capturing a telephone number dialed by the user of the mobile telephone' (*id.* at 5:41-44), this is purely functional language and there is no disclosure in the Specification of the steps taken to carry out this function. In other words, the language in the Specification merely parrots back the functional language of the claims without associating any specific algorithm with that functional language. Specifically, the Specification does not provide any algorithm for how the SIM card or IS-41 mobile telephone is programmed to perform the monitoring function."

- "Specifically, in my opinion, Selex has not cited any Specification support revealing any algorithm for performing the 'monitoring' function as I understand the patent law requires. Instead of identifying or providing any structure, Selex's proposed construction merely lists a number of citations to the Specification as 'structure,' without any explanation how they support this means-plus-function claim."

- "I have reviewed the various Selex citations, and in my opinion none of them provide any algorithm for how a PHOSITA could program the control means to perform this monitoring function. In particular, none of the cited portions of the Specification reveal any details about how the control means can be programmed to monitor telephone numbers dialed on a mobile telephone."

Had Dr. Madisetti applied the same standards here as he did when he testified for the defendants in the prior case, his opinions would side with the views of BlackBerry and its claim construction expert in this case, Richard M. Goodin. Dr. Madisetti's opinions in this case should be disregarded, as further explained below.

This Court should reject all of Sentius's assertions concerning its legally erroneous "one of ordinary skill in the art" arguments as they pertain to disclosure of algorithms.

C.   The Asserted Claims are Indefinite Because the Specification Does Not Disclose Algorithms to Perform the Function of Multiple MPF Limitations.

The asserted claims contain numerous MPF limitations where there is no corresponding algorithm in the specification that performs the recited function. Even the most charitable interpretation of the *Katz* exception could not reasonably be applied to most of these limitations. Thus – with no corresponding algorithm disclosed in the specification and no *Katz* exception to apply – each asserted claim is indefinite.

1.   "Means For Converting"

Term	BlackBerry's Proposal	Plaintiff's Proposal
"means for converting the display address of the selected discrete portion to an offset value from the beginning position address"	Structure: This claim is indefinite under 35 U.S.C. § 112 ¶ 2 and ¶ 6 because the specification does not sufficiently disclose an algorithm to perform the function associated with this limitation.	Structure: a processor programmed to perform the step of determining the offset value of the display location where the user input was received based upon an offset index, and equivalents thereof

The parties agree the function recited in this claim limitation is "converting the display address of the selected discrete portion to an offset value from the beginning position address." However, the claim limitation is indefinite because there is no algorithm disclosed in the specification to perform this converting function. *See* Goodin Decl. at ¶ 78.

Sentius first argues "application program 42" is structure for this limitation. But

"application program 42" is a black box, not an algorithm:
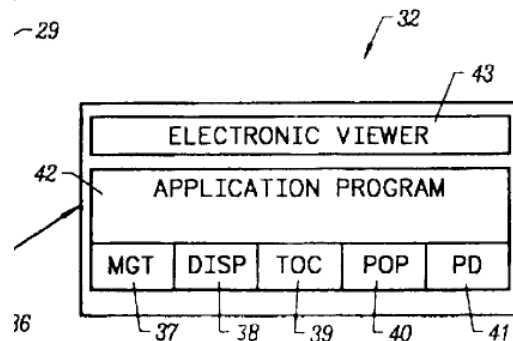
Thus, it is not adequate structure to avoid indefiniteness. *E.g., Blackboard, Inc.*, 574 F.3d at

1382-83 (holding ACM (access control manager) component in specification was not adequate

structure to avoid indefiniteness because "[t]he ACM is essentially a black box that performs a

recited function. But *how* it does so is left undisclosed") (emphasis added). Sentius argues in its

brief that the black-box application program would include programming (Dkt. 55 at 32), but

here again there is no disclosure in the specification as to what that "programming" would be or

how (*i.e.*, a step-by-step procedure) it would convert the display address of the selected discrete

portion to an offset value from the beginning position address. (*See* Goodin Decl. at ¶ 80).

Sentius also cites to the portions of the patent specification that state the "click position is

determined and used to calculate an offset value…." Dkt. 55 at 32. But here again there is no

disclosure as to *how* (*i.e.*, with a step-by-step procedure) the display address of the selected

discrete portion is converted to an offset value from the beginning position address. (*See* Goodin

Decl. at ¶¶ 78-79). In the example provided and cited by Sentius, the specification simply states

that "the user clicks at a particular location, e.g. horizontal and vertical coordinates 100 and 75,

respectively, *and an offset value of 25 is returned.*" '731 Patent, 6:53-55 (emphasis added). [1]

Again, there is no disclosure as to *how*. (*See* Goodin Decl. at ¶ 79). Only, in conclusory fashion,

does the specification state that an "offset value [] is returned."[2]

Likewise, Sentius's citations to the "user interface 32" (Dkt. 55 at 32) are unavailing

because here again there is no algorithm disclosed in the specification and no explanation of how

this user interface would convert the display coordinates of user input into an offset value. *Id.*;

see Goodin Decl. at ¶¶ 80-81. Finally, Sentius's repeated argument that "one of ordinary skill in

the art would understand" is not a substitute for missing structure. "A patentee cannot avoid

providing specificity as to structure simply because someone of ordinary skill in the art would be

able to devise a means to perform the claimed function." *Blackboard*, 574 F.3d at 1385. Indeed,

"[t]hat ordinary skilled artisans could carry out the recited function in a variety of ways is

precisely why claims written in 'means-plus-function' form must disclose the particular structure

that is used to perform the recited function." *Id*.

Because there is no supporting algorithm disclosed, the claim limitation is indefinite.

2.   "Means For Determining A Beginning Position Address"

Term	BlackBerry's Proposal	Plaintiff's Proposal
"means for determining a beginning position address of textual source material	Structure: This claim is indefinite under 35 U.S.C. § 112 ¶ 2 and ¶ 6 because the	Structure: a processor programmed to perform the step of assigning a character

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[1] Throughout this brief, BlackBerry references and cites to the '731 Patent. The same arguments, however, equally apply to the '633 Patent, as the specifications are identical and both are reissue patents of U.S. Patent No. 5,822,720.

[2] Although it may appear at first glance that the example calculates the offset by subtracting the vertical coordinate from the horizontal coordinate in the (X, Y) display coordinates (*i.e.*, 100-75 = 25), that is not correct and Sentius does not make that assertion. The "offset value" has to be "from the beginning position value." Subtracting (X, Y) display coordinates in this manner cannot be correct, because for example if the coordinates were (100, 100), the offset would be "0," which clearly is not an offset *from the beginning position value*.

stored in an electronic database"	specification does not sufficiently disclose an algorithm to perform the function associated with this limitation.	position for the first character of a given set of text within an open text file, and equivalents thereof.

The parties agree that the function recited is "determining a beginning position address of textual source material stored in an electronic database." However, there is nothing in the specification that discloses a step-by-step procedure for performing this function. (*See* Goodin Decl. at ¶¶ 31-32). Accordingly, this claim limitation is indefinite.

Sentius argues in its brief that the "specification clearly articulates the structure, 'a processor programmed to perform the step of assigning a character position for the first character of a given set of text with an open text file, and equivalents thereof….'" Dkt. 55 at 16. This statement by Sentius is incorrect. Sentius provides no citation for this passage, and neither this passage nor anything close to it appears anywhere in the patent specification. Further, none of the specification disclosures cited by Sentius that actually do exist in the '731 Patent disclose an algorithm – *i.e.* a step-by-step process – for performing the recited function. For example, Sentius cites the following disclosure from the '731 Patent, column 5, lines 7-13: "[a]n electronic book and/or a multimedia source 14 … is edited during construction of a linked text database by a visual editor 19 that used to build a wordified database 20." Dkt. 55 at 16. Nothing about this sentence, however, discloses an algorithm for *determining a beginning position address* of textual source material. (*See* Goodin Decl. at ¶33). Sentius also cites to the portion of the '731 Patent at column 7, lines 6-10:

> The word cutting process is accomplished using a simple visual editor, for
> example a point and click system using a pointing device, such as a mouse. The
> process divides the text into the individual components of text that are linked with
> the additional reference material. The original text is provided by a publisher in
> electronic form in a raw binary text format (e.g. an ASCII text file or other word

processor file). This text is then divided up into the component word or phrases in preparation for the next step.

Dkt. 55 at 17. Here, again, there is no disclosure of an algorithm that performs the recited function for this limitation. (*See* Goodin Decl. at ¶ 34). Instead, as is typical of the disclosures cited throughout Sentius's brief, only black-box components allegedly used to perform the algorithm – not the algorithm itself – are disclosed. Likewise, Sentius's citation to column 7, lines 29-33 of the patent specification also is unpersuasive. (*See* Dkt. 55 at 17). There, the specification states that "cuts are indexed based upon the position offset from the beginning of the text," but as with the prior MPF limitations, there is no step-by-step procedure disclosed for determining the "beginning of the text" or the claimed "beginning position address." (*See* Goodin Decl. at ¶ 33).

For the claim to survive indefiniteness, the specification must disclose an algorithm that performs the function of *determining a beginning position address*. Nothing cited by Sentius discloses such a step-by-step process for *determining a beginning position address*, and there is nothing else in the specification that could support it. Citing black-box components with no algorithm to make the determination is not sufficient; the algorithm itself must be disclosed for the claim to escape indefiniteness. *See Blackboard, Inc.*, 574 F.3d at 1382-83) (in rendering a claim indefinite for lack of disclosed structure, stating "[b]ut that is not description of structure … [the component] is essentially a black box that performs a recited function. But how it does so is left undisclosed.").

Similarly, Sentius's argument that "[o]ne of ordinary skill in the art would understand" or "would know" is not a substitute for missing structure. *See* Dkt. 55 at 17. As explained above, a "patentee cannot avoid providing specificity as to structure simply because someone of ordinary skill in the art would be able to devise a means to perform the claimed function." *Blackboard*,

574 F.3d at 1385. Because no such algorithm disclosing how the beginning position address is determined exists anywhere in the specification (*see also* Goodin Decl. at ¶¶ 30, 32), the claim is indefinite.

3.   "Means For Determining Starting Point Address(es)"

Term	BlackBerry's Proposal	Plaintiff's Proposal
"means for determining [a] starting point address{es} and [an] ending point address{es} of at least one of the plurality of discrete pieces based upon the beginning position address"³	Structure: This claim is indefinite under 35 U.S.C. § 112 ¶ 2 and ¶ 6 because the specification does not sufficiently disclose an algorithm to perform the function associated with this limitation.	Structure: a processor programmed to perform the step of identifying, for any given words in the file to be linked, their starting and ending character positions offset from the first character position, and equivalents thereof.

Here again, the recited function of this limitation has no corresponding algorithm disclosed in the specification. Sentius identifies certain black-box components recited in the specification, but there is no disclosure as to *how* these components actually perform the recited function (*i.e.*, an algorithm). (*See* Goodin Decl. at ¶ 45). For example, Sentius asserts that the disclosure of a "grammar parser 23 and a link engine 22 that build an index 21 which, in turn locates each textual and audio/video reference in the source material" somehow constitutes an algorithm for determining a starting point and an ending point address based upon the beginning position address. *See* Dkt. 55 at 19. This disclosure does not convey to one of ordinary skill in the art *how* the function of determining a starting point and an ending point address based upon the beginning position address is actually performed. (*See* Goodin Decl. at ¶ 46). Recitation of black-box components that may or may not be related to the recited function – something Sentius

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³ Text in brackets appears only in the '731 Patent, while text in curly braces appears only in the '633 Patent.

continually relies on as disclosure throughout its brief instead of an algorithm – is not sufficient. The step-by-step process itself must be disclosed or the disclosure does not meet the MPF standard. *See, e.g., Blackboard, Inc.*, 574 F.3d at 1383-85.

Similarly, Sentius points to the disclosure that "[t]he start and end points of the cut text are recorded in a look-up table." Dkt. 55 at 20 (quoting '731 Patent, 7:34-35). Again, nothing about this discloses *how* the starting and ending point addresses are determined based on the beginning position address. Merely reciting that start and end points are recorded in a look-up table does not in any way suggest how the starting and ending point are *determined based on the beginning position address*. (*See* Goodin Decl. at ¶ 46). The same applies to the other disclosure cited by Sentius – *i.e.*, "[t]he offset value is compared to the start and end position indices stored in a look-up table (201, 202)" – there is no explanation as to how it is done. (*See* Goodin Decl. at ¶ 46).

Finally, at the end of its argument, Sentius makes the incorrect assertion that "the specification clearly articulates the structure 'a processor programmed to perform the step of identifying, for any given words in the file to be linked, their starting and ending character positions offset from the first character position, and equivalents thereof.'" Dkt. 55 at 20. The specification *does not* "articulate," much less "clearly articulate," such a disclosure. Nothing remotely close to resembling such a disclosure appears anywhere in the specification. Sentius has made it up out of whole cloth, and it should be rejected because it is not a disclosure of structure actually appearing in the specification. Because the recited function has no corresponding disclosure in the specification, the asserted claims should be held indefinite.

4.   "Means For Determining A Display Address"

Term	BlackBerry's Proposal	Plaintiff's Proposal
"means for determining a display address of the selected discrete portion"	Structure: This claim is indefinite under 35 U.S.C. § 112 ¶ 2 and ¶ 6 because the specification does not sufficiently disclose an algorithm to perform the function associated with this limitation.	Structure: a processor determining the display coordinates of the user input, and equivalents thereof.

Here again, this claim limitation is indefinite for failure to disclose adequate structure in the specification. Sentius's arguments to the contrary lack merit.

Sentius first argues this limitation is not a MPF limitation "because the limitation includes the structure necessary to perform the recited function." Dkt. 55 at 30. Sentius's position is wrong. This limitation contains no structure and no algorithm. Sentius's argument that "the selected discrete portion" is the structure because the limitation is determining the display address of "the selected discrete portion," is circular and nonsensical. *See* Dkt. 55 at 30. Because this limitation does not fall within the three narrow categories of the *Katz* exception – "processing," "receiving" or "storing" – a specially programmed computer, and a disclosed algorithm, are required. (*See also* Goodin Decl. at ¶ 71). Neither is disclosed in the patent specification.

Here again, Sentius relies on black-box components (the user interface 32, application program 42 and electronic viewer module 43) for alleged structure. And for the same reasons as before, these black-box components, without a corresponding algorithm, are insufficient structure to avoid indefiniteness. *See Blackboard, Inc.*, 574 F.3d at 1382-83) (in rendering a claim indefinite for lack of disclosed structure, stating "[b]ut that is not description of structure

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… [the component] is essentially a black box that performs a recited function. But how it does so is left undisclosed.").

Sentius also points to specification language stating "the user interact[ing] with the electronic book using a pointing device" and "the location of the pointer [being] determined" as support. *See* Dkt. 55 at 31. However, these phrases are not algorithms that perform the recited function; they do not describe the steps of *how* the display address of the selected discrete portion is actually "determined." (*See* Goodin Decl. at ¶ 72). There is no disclosure of such a step-by-step process anywhere in the patent. (*See* Goodin Decl. at ¶ 73).

Moreover, Sentius's repeated argument that "[o]ne skilled in the art would understand" is not a substitute for missing structure. *See* Dkt. 55 at 30-31. "A patentee cannot avoid providing specificity as to structure simply because someone of ordinary skill in the art would be able to devise a means to perform the claimed function." *Blackboard*, 574 F.3d at 1385. Indeed, "[t]hat ordinary skilled artisans could carry out the recited function in a variety of ways is precisely why claims written in 'means-plus-function' form must disclose the particular structure that is used to perform the recited function." *Id*. And here, the specification fails to set forth any particular structure for the function of "determining a display address of the selected discrete portion."

Again, Sentius concludes its argument by falsely claiming the specification "clearly articulates the structure, 'a processor determining the display coordinates of the user input, and equivalents thereof,'" despite the fact that neither those words, nor anything remotely resembling those words, or any algorithm for performing the recited function, appear anywhere in the specification. See Dkt. 55 at 31. The asserted claims are indefinite.

5.   "Means For Selecting One Of The Plurality of External References"

Term	BlackBerry's Proposal	Plaintiff's Proposal
"means for selecting one of the plurality of external reference materials corresponding to the identified one of the plurality of discrete pieces"	Function: Indefinite Structure: This claim is also indefinite under 35 U.S.C. § 112 ¶ 2 and ¶ 6 because the specification does not sufficiently disclose an algorithm to perform the function associated with this limitation.	Structure: a processor programmed to perform the step of using the pointer for the matched offset value range to identify a corresponding external reference material, and equivalents thereof

As stated in the claim, the purpose of this limitation is to select an external reference material corresponding to the discrete piece of text identified by the "means for comparing" limitation in the claim. This "means for selecting" limitation is indefinite for multiple independent reasons.

First, the only possible disclosure in the specification for this limitation is the pop-up menu shown in Figure 3:
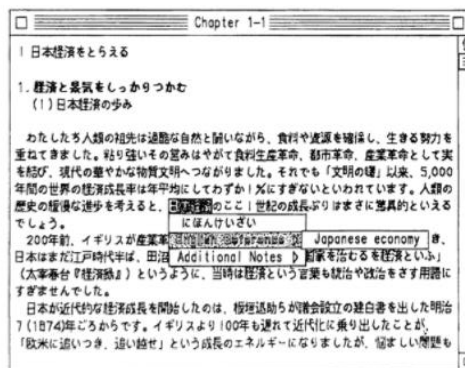
The specification states that "Fig. 3 is a screen display showing a highlighted Japanese word and a pop-up menu, including a translation of the Japanese word, according to the invention." '731 Patent, 7:51-53. The specification further states:

"To select a word or phrase in the book, the user clicks on a word that is not understood and a pop-up menu immediately appears (see Fig. 3). The pop-up information contains the yomi, the English references, and the notes selection … *[t]o view the English reference information the user selects the English Reference from the pop-menu* and the information appears next to the pop-up menu. To see the Note associated with the text, *the user selects Notes from the pop-up menu* and the Note appears in a separate window. If the Notes item is gray (for example, as shown in Fig. 3), no Note is available for the word."

'731 Patent, 9:13-26. (emphases added).

Under this interpretation, with the previous limitation describing the identification of the discrete piece (*i.e.* the Japanese word), *the user* then *selects* one of the external reference materials (*i.e.*, English reference, Notes, etc.) corresponding to the Japanese word. In the context of this patent as a whole, this makes sense. The patent is directed to a system for "accessing and understanding new or difficult materials, in which *a user* highlights unknown words or characters or other displayed elements while viewing displayed materials." *See* '731 Patent, Abstract (emphasis added). Thus, in practical terms, the user who is reading a Japanese language book confronts a word he does not understand and, using a mouse, clicks on the word, and is then presented with a pop-up menu, as shown in Fig. 3. The user then can *select* whether he wants to see the English translation, or Notes related to the word, and the like.

That is one interpretation. Notably, however, Sentius argues that "selecting" *cannot mean* the process of allowing a user to select one of the pop-up menu options as disclosed in Figure 3 and the text in the previous paragraph. Dkt. 55 at 35. Instead, Sentius states that "once the matching entry in the look-up table has been identified in the previous step, *the claimed system would then select the particular link* (out of the links stored in the look-up table) corresponding to that particular matched entry which points the system to the external reference materials to be retrieved for that entry." Dkt. 55 at 36. (emphasis added). Thus, Sentius interprets this function in a different way. As opposed to the function being the user selecting

from the pop-up menu shown in Fig. 3, Sentius apparently argues that the "selecting" is actually

an automated process related to corresponding links in the look-up table. For support of this

interpretation, Sentius characterizes, but does not quote directly, the specification as follows:

"the specification recites that the user interface 32 (which includes application program 42)

accesses the offset index 35 to determine what corresponding external reference material is

pointed to by the linking information for that word via the linking information recorded for that

entry." Dkt. 55 at 36.

As such, there are at least two available interpretations of this limitation that conflict with

each other. This, in and of itself, is evidence of indefiniteness, as the limitation does not "inform

those skilled in the art about the scope of the invention with reasonable certainty," and thus is

invalid. *Nautilus Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2129 (2014); *see also Evicam

Int'l, Inc. v. Enf't Video, LLC*, No. 4:16-CV-105, 2016 WL 6470967, at *20 (E.D. Tex. Nov. 2,

2016) (finding limitation indefinite where there were "multiple reasonable interpretations").

Second, independent of the meaning of the function, regardless of interpretation, there is

not sufficient disclosure in the specification for this limitation. Nowhere in its brief does Sentius

identify an algorithm. Instead, Sentius argues that "[o]ne skilled in the art would understand that

the 'application program 42' and 'link engine 22' obtains the linking information contained in

the data structure corresponding to the matched offset value range, such as a pointer value listed

in the 'link' column from table 202 in Fig. 2." Dkt. 55 at 36. "Application program 42" and

"link engine 22" are depicted below:
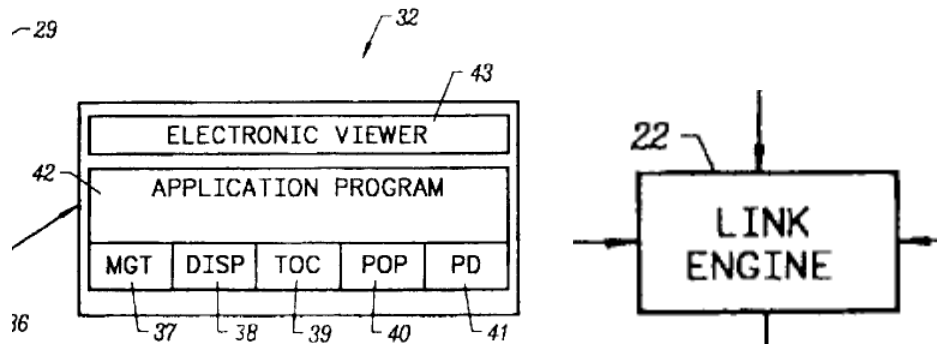
As the Court can see, they are not algorithms; they are black boxes that do not disclose

how the recited function is performed, which the Federal Circuit has expressly rejected as

adequate structure for a § 112, ¶ 6 limitation implemented by a computer. *E.g., Blackboard, Inc.,*

574 F.3d at 1382-83 (holding ACM (access control manager) component in specification was not

adequate structure to avoid indefiniteness because "[t]he ACM is essentially a black box that

performs a recited function. But how it does so is undisclosed."). Likewise, Sentius cites to

references in the specification stating that "external references can be resolved" and "the external

reference is resolved," but here again there is no algorithm to disclose how it is done.[4] Sentius's

repeated reliance on its "[o]ne of ordinary skill in the art would understand that . . ." and "[o]ne

of ordinary skill in the art would recognize that . . ." arguments also are misplaced because the

Federal Circuit has expressly rejected the argument that knowledge of one of ordinary skill can

substitute for required structure in the specification. *See id.* at 1385.

In short, there is no algorithm disclosed, and the claim limitation is indefinite.

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[4] Sentius' remaining citations relate to making a match based on the offset value, which has nothing to do with the "means for selecting" limitation but instead relate to the "means for comparing" limitation.

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6.   "Means For Cutting"

Term	BlackBerry's Proposal	Plaintiff's Proposal
"means for cutting the textual source material into a plurality of discrete pieces"	Structure: This claim is indefinite under 35 U.S.C. § 112 ¶ 2 and ¶ 6 because the specification does not sufficiently disclose an algorithm to perform the function associated with this limitation.	Structure: a processor programmed to perform the step of parsing the given set of text into individual words, and equivalents thereof.

The specifications do not disclose a corresponding algorithm for the agreed-upon

function of "cutting the textual source material into a plurality of discrete pieces." (*See* Goodin

Decl. at ¶ 37). Column 7, Lines 1-10 provides some explanation of the cutting process; it does

not, however, sufficiently disclose an algorithm to perform the function:

> "[t]he word cutting process is accomplished using a simple visual editor, for
> example a point and click system using a pointing device, such as a mouse. The
> process divides the text into the individual components of text that are linked
> with the additional reference material. The original text is provided by a
> publisher in electronic form in a raw binary text format (e.g. an ASCII text file or
> other word processor file). This text is then divided up into the component word
> or phrases in preparation for the next step."

This passage is deficient as a disclosure for MPF purposes because it only discloses, at best, a

manual process for the "cutting" function. (*See* Goodin Decl. at ¶¶ 38, 39). That is, it discloses

the "cutting into a plurality of pieces" being done by a human "using a pointing device, such as a

mouse." *See* '731 Patent, 7:1-10. This disclosure, however, does not save the claim limitation's

indefiniteness issue because structure that requires a human is insufficient for MPF purposes.

See Default Proof, 412 F.3d at 1300 ("a human being cannot constitute a 'means'") (citation

omitted). Furthermore, the passage does not recite any step-by-step procedure as to how a

human using a "pointing device" cuts text; nor does it describe any automated (*i.e.*, non-manual)

process for "cutting." (*See* Goodin Decl. at ¶¶ 38, 39).

Sentius relies on the above disclosure for evidence of an algorithm and indeed specifically quotes the human-required process of a "simple visual editor, for example a point and click system using a pointing device, such as a mouse", but Sentius does not address the fatal issue of this disclosure requiring human input and thus it not being a sufficient disclosure for MPF purposes. *See* Dkt. 55 at 18-19. Thus, Sentius has not and cannot put forth an argument to save this limitation from rendering the claim indefinite.

In addition, as the Federal Circuit has explained, "corresponding structure must include all structure that actually performs the recited function." *Cardiac Pacemakers, Inc. v. St. Jude Med., Inc.*, 296 F.3d 1106, 1119 (Fed. Cir. 2002) (citation omitted). Here, a "point and click system using a mouse" (*see* '731 Patent, 7:1-10) is not all the structure necessary to perform the function of "cutting the textual source material into a plurality of discrete pieces." A general-purpose computer would need to be programmed with specific algorithms to interact with that point and click system in order to cut text. But here, any such algorithms are entirely absent from the specification. While the specification states that a "visual editor, for example a point and click system using a pointing device, such as a mouse" does the cutting, that is insufficient under Federal Circuit case law, because the specification does not explain how the visual editor does the cutting. *See Augme Techs., Inc. v. Yahoo! Inc.*, 755 F.3d 1326, 1338 (Fed. Cir. 2014) ("The portion of the specification describing this step explains that 'code assembler instructions' do the assembling. It discloses inputs to and outputs from the code assembler instructions, but does not include any algorithm for how the second code module is actually assembled. Simply disclosing a black box that performs the recited function is not a sufficient explanation of the algorithm required to render the means-plus-function term definite.") (internal citations and citation omitted)).

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For the foregoing reasons, the claims should be rendered indefinite.

D.   The *Katz* Exception Applies to Several MPF Limitations Because Any General Purpose Computer Can Perform Their Functions

For the following three limitations, the *Katz* exception actually does apply. For each of these limitations, however, Sentius proposes "a processor programmed to perform [the recited function]," despite the fact that the specification does not disclose a processor. This, of course, cannot be correct since MPF limitations are "construed to cover the corresponding structure, material, or acts ***described in the specification***." 35 U.S.C. § 112 ¶ 6 (pre-AIA) (emphasis added). So the following MPF limitations (or, in fact, any of the MPF limitations in the asserted patents) cannot be construed such that the corresponding structure is not actually disclosed in the specification, and thus not "clearly linked to and capable of performing the function claimed by the means-plus-function limitation[s]." *Default Proof*, 412 F.3d at 1299.

Instead, the specification discloses a "personal computer" ('731 Patent, 4:6-8), and so for these limitations to which *Katz* applies, the structure should be what is actually disclosed in the specification: a "personal computer," not a processor. *See*, *e.g.*, *Mobile Telecommc'ns Techs., LLC v. Google Inc.*, No. 2:16-CV-2-JRG-RSP, 2016 WL 7338398, at *44 (E.D. Tex. Dec. 19, 2016) (invoking the *Katz* exception and construing the structure as the disclosed "NOC 12," and not simply just a generic processor).

1.   **"Means For Recording"**

Term	BlackBerry's Proposal	Plaintiff's Proposal
"means for recording in a look-up table the starting and ending point addresses"	Structure: "a personal computer" programmed to record in a look-up table the starting and ending point addresses" of the plurality of discrete pieces (4:7-8)	Structure: a processor storing the identified offset values in a data structure, and equivalents thereof.

Sentius claims that this limitation is not an MPF claim because, according to Sentius, there is sufficient structure in the limitation to perform the recited function. The limitation contains no such structure. (*See* Goodin Decl. at ¶¶ 49, 53). However, BlackBerry acknowledges that the *Katz* exception likely applies to this limitation, because any general purpose computer could perform the recited function without special programming and because the specification discloses a "personal computer." (*See* '731 Patent, 4:6-8; Goodin Decl. at ¶¶ 51-52). Thus, the structure corresponding to this limitation, under *Katz*, should be interpreted as "a personal computer programmed to record in a look-up table the starting and ending point addresses of the plurality of discrete pieces." (*See* Goodin Decl. at ¶ 52). BlackBerry's proposal tracks the claim language, with the inclusion of the disclosure of the personal computer.

Sentius inexplicably provides an entirely different disclosure of the corresponding structure. Sentius is wrong for at least two reasons. First, Sentius' proposal recites "a processor" as opposed to a "personal computer." The specification however only discloses a "personal computer" and not "a processor." *See* '731 Patent. Thus, the structure should be a personal computer, not a processor. (*See* Goodin Decl. at ¶ 53). Second, Sentius' proposal should be rejected because it unnecessarily alters the language of the claim and actually changes the meaning of the claim.

2.   "Means For Linking"

Term	BlackBerry's Proposal	Plaintiff's Proposal
"means for linking [at least one of] the plurality of discrete pieces to [at least one of a plurality of] external reference materials by recording in the look-up table, along with the starting and ending point addresses of [the at least one of] the plurality of discrete pieces, [a] link{s} to [the at least one of] the plurality of external reference materials"	Structure: "a personal computer" programmed to record in the look-up table, along with the starting and ending point addresses of [the at least one of] the plurality of discrete pieces, [a] link{s} to [the at least one of] the plurality of external reference materials (4:7-8)	Structure: a processor storing a pointer in the data structure for a given offset value range that points the system to at least one corresponding external reference material for that offset value range, and equivalents thereof.

Sentius claims that this is not an MPF claim because, according to Sentius, there is sufficient structure in the limitation to perform the recited function. This is partially, but not completely, the case. (*See* Goodin Decl. at ¶¶ 55, 59). The claim limitation contains language that conveys some structure for part of the limitation to one of ordinary skill in the art. (*See id.*). Namely, it describes that the means for linking is done "by recording in the look-up table, along with the starting and ending point addresses of the at least one of the plurality of discrete pieces, a link to the at least one of the plurality of external reference materials…." *See id.* The limitation, however, does not recite a personal computer, which is needed to perform the recording. (*See id.*). BlackBerry acknowledges that the *Katz* exception may apply as to the "recording" because a general purpose computer is capable of performing that function without special programming. The specification discloses a "personal computer" and thus, a personal computer is what should be recited in the corresponding structure. (*See* Goodin Decl. at ¶¶ 56-58).

Sentius again proposes the inclusion of "a processor programmed to," despite it not being disclosed in the specification. Sentius's examples of such disclosures – "link engine," "electronic viewer," and "personal dictionary" – are obviously not disclosure of a processor, as these are software, not hardware, components. (*See* Goodin Decl. at ¶ 59). The specification discloses these components in the context of a "personal computer." Furthermore, Sentius's proposed structure again improperly alters the claim language in a way that changes the meaning and scope of the claim. Thus, it should be rejected.

3.   "Means For Retrieving"

Term	BlackBerry's Proposal	Plaintiff's Proposal
"means for retrieving the selected one of the plurality of external reference materials using a recorded link to the selected one of the plurality of external reference materials "	Structure: a "personal computer" programmed to retrieve the selected one of the plurality of external reference materials using a recorded link to the selected one of the plurality of external reference materials (4:7-8).	Structure: a processor programmed to perform the step of using the pointer for the matched offset value range to obtain the identified corresponding external reference material, and equivalents thereof

Sentius claims that this is not an MPF claim because, according to Sentius, there is sufficient structure in the limitation to perform the recited function. The limitation contains no such structure. (*See* Goodin Decl. at ¶ 94). However, BlackBerry acknowledges that the *Katz* exception would likely apply to this limitation, because any general purpose computer could perform the recited function without special programming and because the specification discloses a personal computer. (*See* '731 Pat. at 4:6-8; Goodin Decl. at ¶¶ 96-97). Thus, the structure corresponding to this limitation, under *Katz*, should be interpreted as "a personal computer programmed to retrieve the selected one of the plurality of external reference materials using a recorded link to the selected one of the plurality of external reference materials[.]" (*See*

Goodin Decl. at ¶ 97). BlackBerry's proposal tracks the claim language, with the inclusion of the disclosure of the personal computer.

Sentius again inexplicably provides an entirely different disclosure of the corresponding structure. Sentius is wrong for at least two reasons. First, Sentius's proposal recites "a processor" as opposed to a "personal computer." The specification however only discloses a "personal computer" and not "a processor." (*See* Goodin Decl. at ¶ 98). Thus, the structure should be a personal computer. Second, Sentius's proposal should be rejected because it unnecessarily alters the language of the claim and actually changes the meaning of the claim.

E.   The Specification of the Asserted Patents Discloses Structure for the Remaining Couple of Limitations

1.   "Means For Selecting A Discrete Portion"

Term	BlackBerry's Proposal	Plaintiff's Proposal
"means for selecting a discrete portion of the displayed textual source material image" "means for selecting a discrete portion of an image of the source material"	Structure: a "pointing device, such as a mouse (200)" (6:50-51, 4:15-22); an "electronic display of a personal computer" (4:7-8); and a "personal computer" (4:7-8)	Structure: a processor determining the location on a display where a user input was received, and equivalents thereof.

BlackBerry acknowledges that the specification discloses structure for performing this function, namely, a "pointing device, such as a mouse (200)" (6:48-51, 4:15-18), an "electronic display of a personal computer" (4:6-8), and a "personal computer" (4:6-8). (*See* Goodin Decl. at ¶ 67).

Sentius argues that this is not an MPF limitation because, according to Sentius, the claim limitation contains sufficient structure. The claim language does not in and of itself contain sufficient structure to convey to one of ordinary skill in the art the means for selecting – the

language only states "a discrete portion of the displayed textual source material image." This

cannot be interpreted as sufficient structure. (*See* Goodin Decl. at ¶ 66).

Sentius alternatively proposes as structure "a processor determining the display

coordinates of the user input, and equivalents thereof," but cannot point to anywhere in the

specification for such a disclosure. (*See* Goodin Decl. at ¶ 68). This yet another attempt at

broadening the scope of the claim should be rejected. The means for selecting are clearly

disclosed in the specification, as BlackBerry has identified, and the structure should be

interpreted as such.

Sentius's proposal also should be rejected because it identifies the wrong function. The

claimed function is "selecting a discrete portion," not determining what was selected, or

"determining the location of a display where a user input was received," as Sentius argues.

2.   "Means For Displaying An Image Of The Textual Source Material"

Term	BlackBerry's Proposal	Plaintiff's Proposal
"means for displaying an image of the textual source material"	Structure: "personal computer" and "electronic display of a personal computer" (4:7-8)	Structure: a processor displaying a portion of a text file, *i.e.*, creating a view of the textual source material to be displayed on an electronic display, and equivalents thereof

BlackBerry acknowledges that the specification discloses structure for performing this

function, namely, a "personal computer" and "electronic display of a personal computer" (4:6-8).

(*See* Goodin Decl. at ¶ 62). Sentius argues that this is not an MPF limitation because, according

to Sentius, the claim limitation contains sufficient structure. The claim language does not in and

of itself contain sufficient structure to convey to one of ordinary skill in the art the means for

displaying – the language only states "an image of the textual source material." This cannot be

interpreted as sufficient structure. (*See* Goodin Decl. at ¶ 61).

Sentius alternatively proposes as structure "a processor displaying a portion of a text file, *i.e.*, creating a view of the textual source material to be displayed on an electronic display, and equivalents thereof" but again cannot point to anywhere in the specification for such a disclosure. (*See* Goodin Decl. at ¶¶ 63-64). This is yet another attempt at broadening the scope of the claim without any support and should be rejected. The means for displaying are disclosed in the specification, as BlackBerry has identified, and the structure should be interpreted as such.

Sentius's structure is also wrong because it conflates the function. The function is "displaying an image of the textual source material." A processor cannot display anything. This is easily demonstrated by turning on a computer without a monitor hooked up to it. The processor provides information to be displayed by the monitor, but it does not do the displaying. Accordingly, Sentius's structure cannot be correct.

3. "Means For Comparing"

Term	BlackBerry's Proposal	Plaintiff's Proposal
"means for comparing the offset value with the starting and ending point addresses recorded in the look-up table to identify one of the plurality of discrete pieces"	Structure: a "personal computer" (4:7-8) programmed to determine whether the offset value falls between the starting and ending point addresses for the plurality of discrete pieces of textual source material stored in the look-up table to identify one of the plurality of discrete pieces of textual source material as a match when the offset value falls between that discrete piece's starting and ending point addresses. (6:55-65; 7:45-49).	Structure: a processor programmed to perform the step of matching the identified offset value with one of the offset value ranges stored in the data structure, and equivalents thereof

BlackBerry acknowledges that the specification discloses structure for performing this function, as identified in the table above. (*See* Goodin Decl. at ¶ 84). Sentius argues that this is

not an MPF limitation because, according to Sentius, the claim limitation contains sufficient

structure. The claim language does not in and of itself contain sufficient structure to convey to

one of ordinary skill in the art the means for comparing. (*See* Goodin Decl. at ¶ 83).

Sentius alternatively proposes as structure "a processor programmed to perform the step

of matching the identified offset value with one of the offset value ranges stored in the data

structure, and equivalents thereof," but cannot point to anywhere in the specification for such a

disclosure. (*See* Goodin Decl. at ¶ 85). This is yet one further attempt at broadening the scope

of the claim and should be rejected. Indeed, Sentius's proposal completely eliminates any

requirement to actually "compare" from the claim. The limitation clearly recites a "means for

comparing" in order to identify (or match) a discrete piece. Under Sentius's proposal though, the

claim is substantially broadened such that the identification (or match) can be determined by any

means, not only via the algorithm actually disclosed in the specification (and equivalents

thereof). The means for comparing are disclosed in the specification, as BlackBerry has

identified, and the structure should be interpreted as such.

V.   ARGUMENT FOR DISPUTED NON-MPF TERMS

A.   "Look-Up Table"

Term	BlackBerry's Proposal	Plaintiff's Proposal
"look-up table"	an array or matrix of data that contains values for searching	a data structure that contains values for searching

A "look-up table" is a specific type of data structure in computer science with a well-

defined meaning. BlackBerry's definition is consistent with this meaning, as evidenced by the

specification, which, in Fig. 2, depicts "look-up table (202)" as a matrix that is searched. *See*

'731 Patent, 6:55-65. It is also consistent with the extrinsic evidence and tracks the definition

provided by technical dictionaries. *See* Ex. C ("An array or matrix of data that contains values

that are searched."); Ex D ("A stored matrix of data for reference purpose."); *see also* Exs. E, F.

Sentius's definition is incorrect because it overly generalizes a "look-up table." While a

"look-up table" is a data structure that contains values for searching, there are many different

types of data structures that contain values for searching (in fact that is the case for most of

them). Not all of them are "look-up tables." For example, other such data structures that contain

values for searching are databases, trees, graphs and heaps. Sentius's definition is akin to saying

that a monkey is a mammal; therefore, the definition of monkey is "mammal." It is incorrect. In

addition, Sentius's argument that "array" and "matrix" are not used in the specification is odd, as

neither is "data structure" (*i.e.*, Sentius's proposed definition). *See* Dkt. 55, 7; *see also* '731

Patent. "Look-up table," of course, is construed as a POSA would understand it. And the

objective evidence, which Sentius ignores by citing only to definitions of "lookup" instead of the

actual term "lookup table," supports BlackBerry's definition.

Accordingly, the Court should adopt BlackBerry's construction, and reject Sentius's re-

drafting of the claims from "look-up table" to "look-up data structure."

B.   "Link"

Term	BlackBerry's Proposal	Plaintiff's Proposal
"link"	a pointer to data or information, or a pointer to the location of data or information	a pointer to data or information or the location of data or information

Sentius's construction is overly confusing, because it uses an "or" three times within its

definition without any commas. Thus, it is unclear what "pointer" modifies. Based on its

opening brief, it appears Sentius's definition is actually "a pointer to data or information, or the

location of data or information." This is incorrect. A "link" is not merely the location of data.

A link (used as a noun) must *link* (verb), *i.e.*, **point**, to the data. This is confirmed by all of the

extrinsic evidence (Exs. G, H), including Sentius's own technical dictionary citations. *See* Dkt.

54-11 at 589 ("[t]o establish a pointer"); Dkt. 54-12 at 4 ("A pointer embedded in a database

record…"). In fact, it is even consistent with Sentius's proposal in the prior litigation in *Sentius Corp. v. Flyswat, Inc.*, Case No. C 00 2233 SBA (N.D. Cal.) (referred to as "*Flyswat* litigation." *See* Ex. I at 4 ("A 'link' is a pointer embedded within a record that refers to data or the location of data in another record.").

Sentius's proposal essentially re-writes the claim from "a link to … external reference material(s)" to "external reference material ***address(es)***." This improper attempt should be rejected. The asserted claims repeatedly recite "address(es)," but the limitations-at-issue recite "link(s)." A "link" and an "address" are not the same thing. *See SimpleAir, Inc. v. Sony Ericsson Mobile Commc'ns AB*, 820 F.3d 419, 431 (Fed. Cir. 2016) (explaining that "'[d]ifferent claim terms are presumed to have different meanings' (internal citation omitted)").

Sentius's citation to Column 5, Lines 14-19 of the '731 Patent is also unhelpful. *See* Dkt. 55 at 9. There, the specification describes (at a very high level, without providing any algorithms for how to do so) creating an "index 21" that includes the location for the "linkable entities, such as text reference 16…." '731 Patent, 5:14-19. These "linkable entities" are the claimed "external reference materials." This, however, is the "index," not the "link" at issue. As described in Figure 2, a "link" is provided (*e.g.*, "TEXT, 200"), which ***points*** to the "index" (*e.g.*, "INDEX 200") that stores the location. *Id.* at 6:57-65. That "link" can be "resolved" to retrieve the "external reference" or "linkable entity" (*e.g.*, "Japanese economy"). As shown, the specification uses "link" in accord with its ordinary meaning, which is a "pointer" as established by the intrinsic and extrinsic evidence. Accordingly, Sentius's definition should be rejected.

C.   **"Beginning Position Address"**

Term	BlackBerry's Proposal	Plaintiff's Proposal
"beginning position address"	beginning memory location	beginning point location

While "beginning position address" is used throughout the claims, it is nowhere present in the specification. In fact, "address" is used only in the claims. The full claim term, however, recites a "beginning position address of textual source material *stored in an electronic database*." This clarifies that the address is the address of the material within the electronic database. Thus, the address is a memory location.

This interpretation is also confirmed by the prosecution history. During prosecution of the patent from which the asserted patents reissued, the applicant repeatedly distinguished the prior art, arguing:

> Further, Cassorla requires a paragraph and word offset in which a link is determined by a paragraph number and an offset within the paragraph. Thus, Cassorla is limited to a specific text format. In contrast, the claimed invention operates upon pure byte offsets that are unrelated to data type, location, and format.
>
> * * *
>
> Cassorla uses the relative position within the document to "fix" the position of associated annotations, thereby generating identifying "tags". The tags are subsequently used to retrieve the annotations by reference to the positions of the document itself. By contrast, the invention creates tagless, media independent, linked documents. Accordingly, the Claims have been amended to reflect that the address on the electronic database is determined for the source material image.

Ex. J-1 at 10-11 (1/12/1996 Response in Prosecution History of '720 Patent); Ex. J-2 at 6-7 (5/23/1996 Response in Prosecution History of '720 Patent). Applicant argued that the invention was "unrelated to data type, location, and format" and "media independent." *Id*. That is because it "operates upon pure byte offsets" using the "address on the electronic database" (*i.e.*, memory location). *Id.* Yet, despite these clear statements, with its construction of "beginning position address," Sentius attempts to eliminate this requirement that the invention is independent of

"data type, location, and format" since it would no longer have to operate upon byte offsets from the address on the electronic database. *See also*, *e.g.*, Ex. K at 32-33 (Judge Armstrong of N.D. Cal. finding these prosecution statements limiting in the *Flyswat* litigation).

In fact, Sentius's simple replacement of the word "location" for "address" must be wrong in light of the prosecution history. After making its argument in the January 12, 1996 Response (Ex. J-1), the PTO rejected this argument, stating that "[w]hile applicant argues the claimed invention operates upon pure byte offsets that are unrelated to data type, it is not seen where this is required by the claim language. Due to the use of broad terms such as 'position' and 'location', Cassorla's coordinates still read on the broad terms of the claim." *Flyswat* Claim Construction Order (Ex. K) (quoting 4/2/1996 Office Action, Prosecution History of the '720 Patent (Ex. J-3)). In the May 23, 1996 Response, as explained by the *Flyswat* court, "Sentius responded by amending the patent to replace 'location' with 'address.'" Ex. K at 33; *see also* J-2 at 2-6. Sentius did this to "reflect that the invention operates upon pure byte offsets," and that the "address on the electronic database" (*i.e.*, memory location) must be determined. Ex. J-2 at 6. Given that Sentius amended the claims from "location" to "address," it cannot use claim construction to revert back to its old claim language, which was rejected by the PTO.

Sentius's definition further provides no clarity for the Court or a jury as to what the term means. Its definition is "beginning point location," but it is entirely uncertain what "point location" means. It appears, however, that Sentius wishes to assert that the "beginning position address" can just be "0" or "1" since the text starts at the first position. But this would render the claim limitation meaningless—if the "beginning position address" were always just a relative position (0 or 1), there would be no reason to *determine* it. This argument also ignores the full

context of the claim and the prosecution history. Accordingly, BlackBerry's definition should be

adopted.

D.   "Offset Value"

Term	BlackBerry's Proposal	Plaintiff's Proposal
"offset value"	the distance from a starting point, either the start of a file or the start of a memory location	a position relative to a starting point

In the *Flyswat* litigation, the parties construed claims of the same patent (before the

reissue), and Sentius agreed that "offset" is the "distance from a starting point." Ex. K at 37-38.

Without explanation, Sentius now departs from this definition, which is consistent with the

intrinsic and extrinsic evidence. *See*, *e.g.*, Ex. L ("The distance from a starting point, either the

start of a file or the start of a memory address."); *see also* Exs. M, N, and O.

As described above, Sentius explained during prosecution that "the claimed invention

operates upon pure byte offsets that are unrelated to data type, location, and format." Ex. J-1 at

10-11 (1/12/1996 Response). This explanation too is consistent with the specification. The

description accompanying Figure 2 describes that a user clicks on text on the screen and "an

offset value of 25 is returned." '731 Patent, 6:46-55. This means that the user clicked on text

that is stored at an address 25 bytes from the "beginning position address." Thus, the offset

value is "the distance from a starting point, either the start of a file or the start of a memory

location," which in the context of the patents-at-issue is the distance from the "beginning

position address."

Sentius's definition of "a position relative to a starting point" is vague and provides little

clarity to the Court or a jury, as it is uncertain what "relative" means within the context of the

claims. It also ignores the prosecution history, in which Sentius explained that the invention

operates on "pure byte offsets that are unrelated to data type, location, and format." Ex. J-1 at

10-11 (1/12/1996 Response). In making this statement, Sentius was distinguishing the Cassorla

reference, which "requires a paragraph and word offset in which a link is determined by a

paragraph number and an offset within the paragraph," and thus "is limited to a specific text

format." *Id.* Yet, Sentius now attempts to broaden the claims such that they are not "unrelated

to" but actually depend upon "data type, location, and format" by defining "offset value" to be

any "position *relative* to a starting point." In addition, Sentius's argument that the word

"distance" is not found in the claims or specification is silly, as neither is the word "relative" in

Sentius's definition.

The Court, therefore, should adopt BlackBerry's definition, which is consistent with the

specification, prosecution history, and extrinsic evidence.

E.   **"Starting Point Address" and "Ending Point Address"**

Term	BlackBerry's Proposal	Plaintiff's Proposal
"starting point address"	an offset value from the beginning position address to the starting point	starting point location
"ending point address"	an offset value from the beginning position address to the ending point	ending point location

Unlike "beginning position address," the "starting" and "ending point address[es]" are

not memory locations. Instead, they are offsets from the "beginning position address." This is

clear from the claim language itself. The asserted claims require a determination of these

addresses "based upon the beginning position address." *See* '731 Patent, Claim 95; '633 Patent,

Claim 17. The claims further require determination of a "display address" of a "selected discrete

portion," which is then converted to "an offset value from the beginning position address…." *Id.*

This "offset value" is then compared against the "starting and ending point addresses" in the

"look-up table" (*id.*), which is also illustrated in Figure 2. This process, however, would make

no sense unless the "starting" and "ending point address[es]" were also offsets from the

"beginning position address." If not, the calculated "offset value" in the claim would never match (*i.e.*, fall between the starting and ending addresses) in the "means for comparing" step and no "external reference material" could ever be selected and displayed (and the claim would be indefinite).

In addition, this construction is consistent with the specification, which describes that "cuts are indexed based upon the position offset from the beginning of the text," and as illustrated in Figure 2. *See* '731 Patent, 7:32-33 and Fig. 2. It is also consistent with Judge Armstrong's construction in the *Flyswat* litigation, in which she found that the meaning of "address" here included "'pure byte offset' because this meaning was expressly given to the process in order to avoid prior art," as discussed above with respect to the Cassorla reference. Ex. K at 33.

As with "beginning position address," it is unclear what Sentius's definition means. Oddly, Sentius also construes "position address" and "point address" to both mean "point location" without explanation, ignoring the "general presumption that different terms have different meanings…." *Chi. Bd. Options Exch., Inc. v. Int'l Sec. Exch., LLC*, 677 F.3d 1361, 1369 (Fed. Cir. 2012) (citation omitted). In addition, when construing the structure for the entire "means for determining" MPF limitation, Sentius acknowledges BlackBerry's construction. *See* Dkt. 55 at 19. There, although stated ambiguously, Sentius refers to the "starting and ending character positions offset from the first character position" (and does not refer to "starting/ending point location"). *Id.* The Court, therefore, should adopt BlackBerry's construction.

F.   **"Display Address"**

Term	BlackBerry's Proposal	Plaintiff's Proposal
"display address"	a pixel location or screen coordinates on a display	display location

In the *Flyswat* litigation, Sentius construed the phrase "determining the *address of said selected discrete portion.*" Ex. K at 2 (emphasis in original). Sentius argued that this referred "to the address in the source material image of the discrete portion of the source material image which has been selected," and thus "address of said selected discrete portion" was the "pixel location of the screen display accessed by a user's click." *Id.* at 34-35. Sentius also agreed that "pixel location" "is synonymous with the term 'screen coordinate' in the context of the patent." *Id.* at 35. Judge Armstrong agreed, finding that this "address" was the "pixel location" or "screen coordinates." *Id.* at 37. Here, the same construction applies for "means for determining a *display address* of the selected discrete portion," and Sentius is judicially estopped from arguing otherwise. *See Conversant Intellectual Prop. Mgmt Inc. v. Xilinx, Inc.*, No. 6:12-CV-847, 2015 WL 138157, at *3 (E.D. Tex. Jan. 9, 2015) ("'Judicial estoppel prevents a party from asserting a position in a legal proceeding that is contrary to a position previously taken in the same or some earlier proceeding.' (citation and internal quotation marks omitted)").

BlackBerry's construction is also required by the specification of the patents-in-suit. The specification clearly describes that a "user clicks at a particular location" on a screen, and then the "horizontal and vertical coordinates" (*i.e.*, screen coordinates) are returned. '731 Patent, 6:51-55. Sentius's definition, on the other hand, simply substitutes "location" for "address" without any explanation of what this means, simply clouding the issue for the Court or a jury in the future. This is particularly confusing since Sentius uses the same "location" definition that it used in the other "address" limitations. Yet, as described in the *Flyswat* litigation, this address

(*i.e.*, "display address") is referring to an address on the screen, as opposed to an address in memory, which is the case for the other "address" limitations. *See* Ex. K at 34-37.

In addition, within the "means for determining a display address" MPF argument, Sentius validates BlackBerry's construction. In stating the structure for that limitation, it refers to "a processor determining the ***display coordinates*** of the user input…." Dkt. 55 at 29 (emphasis added). "Display coordinates," of course, refers to the "screen coordinates on a display," as in BlackBerry's definition. Accordingly, the Court should reject Sentius's vague and unhelpful definition and adopt BlackBerry's.

VI.   CONCLUSION

For the above-stated reasons, BlackBerry respectfully requests that the Court adopt its proposed definitions, and that the Court further bar plaintiff from arguing contrary definitions to the jury.

Dated: June 9, 2017   Respectfully Submitted,

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that all counsel of record who are deemed to have

consented to electronic service are being served with a copy of this document via the Court's

CM/ECF system per Local Rule CV-5(a)(3) on this 9th day of June 2017.

/s/ Anthony F. Blum
Anthony F. Blum